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TEXAS COMMISSION ON ENVIRONMENTAL QUALITY 6WQ-S

Protecting Texas by Reducing and Preventing Pollution

April 7, 2011

Ms. Stacey B. Dwyer, P.E.
Associate Director
Source Water Protection Branch
United States Environmental Protection Agency
Region 6
1445 Ross Avenue, Suite 1200
Dallas, Texas 75202-2733

Re: Letter from Stacey B. Dwyer, P. E., Associate Director, Source Water Protection Branch, EPA Region 6, to Earl Lott, Director, Waste Permits Division, Texas Commission on Environmental Quality (TCEQ or Commission), requesting a meeting to discuss technical aspects of TexCom Disposal LLC, Inc.'s (TexCom) application for Permits No. WDW410, WDW411, WDW412, and WDW413

Dear Ms. Dwyer:

Thank you for your correspondence regarding the above referenced application. We appreciate your interest in this application and your continued recognition of the state's primary enforcement authority for the Underground Injection Control (UIC) program under the Safe Drinking Water Act and regulations codified in 40 CFR, Part 147, Subpart SS.

In your letter you raise the following concerns regarding protection of underground sources of drinking water (USDWs): siting of TexCom's wells in an area where well bores may have incomplete or missing records; the possibility that well bores may provide a pathway for migration of fluids into overlying USDWs; the accuracy of site geology and injection zone characteristics, the accuracy of predicted reservoir pressure build up; and technical sufficiency of the application. Also, you request a meeting with UIC permitting staff to discuss your concerns.

For clarification, the commissioners' action on January 26, 2011, did not conclude the administrative process for this application. The Commission order granting TexCom's permits is not final because it is subject to Commission action on motions for rehearing filed in accordance with Title 30, Texas Administrative Code, (TAC) Section 80.272, and Texas Government Code, Section 2001.146. Since this application is contested the final decision rests with the commissioners. The commissioners are limited to consideration of the evidentiary record when rendering a decision following a contested case hearing. The evidentiary record in this matter is closed, the Executive Director is a party and the Commission's decision is not final. Therefore, staff is unable to meet with you to discuss any technical concerns with the application.

TCEQ remains committed to protection of USDWs consistent with the mandates of the controlling state and federal statutes and TCEQ's approved UIC Program. In this case, the Executive Director's staff carefully reviewed TexCom's application in accordance with federal and state laws and rules.

The UIC application was initially reviewed by the Executive Director's staff and subsequently reviewed by two Administrative Law Judges (ALJs) during two contested case hearings conducted by the State Office of Administrative Hearings over a 2-1/2 year period. The application was ultimately reviewed by the three commissioners. The ALJs and the commissioners considered the UIC application and the evidence admitted during the hearings to determine whether use and installation of the proposed wells complies with applicable rules and statutes. The Commission's decision to grant TexCom's UIC permits is supported by abundant evidence in the evidentiary record that TexCom met its burden of proof that the application and the draft permits comply with all applicable regulatory and statutory requirements.

Abundant evidence was admitted in the contested case hearings addressing your concerns regarding siting in an area where well bores may have incomplete or missing records. In addition the ALJs considered evidence regarding whether well bores may provide a pathway for migration of fluids into overlying USDWs. The ALJs determined that "[t]he commission's rule at 30 TAC § 331.121(a)(2)(A)-(C) requires the Commission to consider: (1) a map showing, within the [Area of Review] AOR, the identity and location of all producing wells, injection wells, abandoned wells, and dry holes; (2) a tabulation of all wells within the AOR which penetrate the injection zone or confining zone, including a description of the well type, construction, date drilled, location, depth, and a record of plugging and/or completion; and (3) the protocol followed to identify, locate, and ascertain the condition of abandoned wells within the AOR which penetrate the injection or the confining zone." (Amended Proposal for Decision After Remand (Amended PFD), Page 42 (Nov. 8, 2010)). The ALJs also determined that "TexCom provided the required map, voluminous records, and a spreadsheet tabulation of the records [as well as] testimony concerning its efforts to search and locate wells. (*Id*). The ALJs stated, "considering all the evidence, the ALJs find that TexCom has adequately accounted for the artificial penetrations within the [Cone of Influence] COI and AOR which penetrate the Jackson Shale upper confining unit and the Cockfield formation injection zone." (*Id* at Page 42-43). Additionally, the ALJ's determined that "[n]o corrective actions are needed with respect to any known artificial penetrations in the area in order to prevent or correct pollution of USDWs as contemplated by 30 Tex. Admin. Code §§ 305.152 and 331.44." (Proposed Order at Page 38, (Nov. 8, 2010)(Conclusion of Law No. 43)). Under TCEQ's approved UIC Program TexCom is required to submit a report to the Executive Director evaluating the AOR for artificial penetrations that may require corrective action. (30 TAC 331.65(c)(3)). TexCom is required to submit this information regarding artificial penetrations in the AOR prior to commencement of injection activities and annually thereafter for the life of the well. (*Id*) If the Executive Director determines that newly constructed or newly discovered wells that penetrate the confining and/or injection zone require corrective action to prevent movement of fluids into or between USDWs or freshwater aquifers TexCom will

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be required to conduct corrective action approved by the Executive Director. (30 TAC 331.44(b)).

Abundant evidence was admitted in the contested case hearings addressing your concerns regarding geologic suitability and geologic characteristics of the injection zone. The ALJs determined that "TexCom satisfied the criteria set out in [30 TAC] § 331.121(c)(2), and that TexCom's Class I wells are sited in geologically suitable areas. (Amended PFD, Page 24)." In light of all of the evidence in the record, the ALJs determined an appropriate COI and AOR after considering "appropriately conservative reservoir modeling." (*Id* at Page 77).

You raised concerns regarding the accuracy of site geology and characteristics of the injection zone and the accuracy of *predicted* reservoir pressure build up. Injection zone characteristics are utilized as input parameters to model predicted extent of the waste plume and predicted pressure build up the reservoir. These reservoir models are tools used to *predict* future conditions in the reservoir. TexCom is required to conduct tests and submit results of testing prior to commencement of disposal activities and annually thereafter for the life of the well. Data derived from required testing may be used to update the model annually for greater accuracy in predicting pressure trends. The ALJs describe the regulatory result if predictions generated by modeling are not borne out by real time testing of reservoir conditions. "If new testing showed TexCom's assumptions were not conservative enough, the TCEQ would require certain project parameters be changed to compensate for the unfavorable test results, such as reduction of the maximum allowable pressure." (Amended PFD, Page 59).

You state that you "believe that the TexCom [UIC] permit application is technically insufficient to show that injection will not endanger [USDWs]." The ALJs considered whether the issue of technical sufficiency or insufficiency of TexCom's application was an appropriate issue to be litigated in the two contested case hearings held on Texcom's applications. The ALJ's determined that "whether TexCom's [UIC] Application is administratively or technically complete is not a decisive issue for this case [but rather] the substance of the information provided in the Application and other evidence must be evaluated to determine whether the proposed injection wells satisfy the requirements of the applicable statutes and rules." (Amended PFD, Page 21).

If you have any further questions, please contact Ms. Susan Jablonski, Director of Radioactive Materials Division at (512) 239-6731 or Mr. Ben Knape, Team Leader of the Underground Injection Control Team at (512) 239-6633.

Sincerely,



Earl Lott, Director
Waste Permits Division
Texas Commission on Environmental Quality

EL/tlc